

Office of Regulatory Staff 1401 Main Street Suite 900 Columbia, SC 29201 (803) 737-0800 ORS.SC.GOV

June 17, 2022

Ashton Inabinett
Office Manager
Chem-Nuclear Systems, LLC
740 Osborn Road
Barnwell, SC 29812

Re: Rate Schedules and Annual Adjustments - FY 2022-2023

#### Dear Deborah:

Attached are the approved Maximum Uniform Rate Schedule ("MURS") and Alternative Rate Schedule ("ARS") for FY 2022-2023. Pursuant to Section 48-46-40(A)(4), South Carolina Code of Laws, the South Carolina Office of Regulatory Staff ("ORS") must adjust the MURS for Atlantic Compact waste generators each year in accordance with the most recently published Producer Price Index ("PPI") available in March. The ARS represents the results of negotiations between Chem-Nuclear and the Atlantic Compact utilities.

Pursuant to the Memorandum of Understanding, signed June 30, 2009, and approved by the South Carolina Budget and Control Board, regarding pricing and operational costs, the maximum amount of yearly disbursals from the Barnwell Decommissioning Trust Fund and/or the Barnwell Extended Care Maintenance Fund shall be adjusted each year in accordance with the most recently published PPI to cover "Institutional Costs" of the disposal facility and its surroundings. Under the North American Industry Classification System (NAICS), Industry Code 325 (Chemical Manufacturing, or Chemical mfg) is used as the basis for the annual adjustment of the MURS. ORS calculated the annual adjustments to the MURS, which will be applicable for Fiscal Year 2022 through 2023. The most recent data from the U.S. Bureau of Labor Statistics ("BLS") is the February 2022 PPI Detailed Report. The PPI shows an **increase of 13.9 percent** from February 2021 to February 2022 per the "Chemical mfg" code, which has been applied to MURS rates for FY 2022 through 2023.

The maximum amount of yearly disbursals from the Barnwell Decommissioning Trust Fund and/or Barnwell Extended Care Maintenance Fund shall be <u>increased from \$2,561,172 to \$2,663,619</u> based on the February 2022 PPI <u>increase of 4.0 percent</u> for "Other selected services less trade, transportation, and warehousing industries". The BLS has updated the location for the "Chemical mfg" unadjusted twelve-month percent change in the PPI Detailed Report from Table 11 to Table 12, however, Table 11 reflects the unadjusted index data. Copies of the relevant portions of the PPI Detailed Report are also attached for reference.

Sincerely,

Nanette Edwards Executive Director

South Carolina Office of Regulatory Staff

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Pursuant to 48-46-40(A)(2), S.C.C.

# Uniform Schedule of Maximum Disposal Rates for Atlantic Compact Regional Waste

**EFFECTIVE JULY 1, 2022** 

The Uniform Schedule of Maximum Disposal Rates for Atlantic Compact Regional Waste is a permanent ceiling on disposal rates applicable to Atlantic Compact waste that is adjusted each year in accordance with the Producer Price Index. South Carolina may charge Atlantic Compact generators less than the Uniform Maximum schedule but cannot charge regional generators more than this rate.

THE MINIMUM CHARGE PER SHIPMENT, EXCLUDING SURCHARGES AND SPECIFIC OTHER CHARGES, IS \$1,000.00

#### 1. WEIGHT CHARGES (not including surcharges)

#### A. Base weight charge

	Density Range		Weight Rate
i.)	Equal to or greater than 120 lbs./ft <sup>3</sup>	\$	9.801 per pound
ii.)	Equal to or greater than 75 lbs./ft³ and less than 120 lbs./ft³	\$	10.782 per pound
iii.)	Equal to or greater than 60 lbs./ft³ and less than 75 lbs./ft³	\$	13.231 per pound
iv.)	Equal to or greater than 45 lbs./ft³ and less than 60 lbs./ft³	\$	17.153 per pound
v.)	Less than 45 lbs./ft <sup>3</sup>	pou	17.153 per pound tiplied by: (45 ÷ inds per cubic foot ne package)

#### B. Dose multiplier on base weight charge

Container	Dose	e Level	Multiplier on Weight Rate, above						
0 mR/hr	-	200 mR/hr	1.00						
>200 mR/hr	-	1 R/hr	1.08						
>1R/hr	-	2R/hr	1.12						
>2R/hr	-	3R/hr	1.17						
>3R/hr	-	4R/hr	1.22						
>4R/hr	-	5R/hr	1.27						
>5R/hr	-	10R/hr	1.32						
>10R/hr	-	25R/hr	1.37						
>25R/hr	-	50R/hr	1.42						
>50R/hr			1.48						



#### Pursuant to 48-46-40(A)(2), S.C.C.

C. Biological Waste: Add \$2.130 per pound to rate calculated above

#### 2. SURCHARGES

A. Millicurie surcharge

\$0.734 per millicurie\*

\*In lieu of above, generator may opt for an alternative millicurie charge of \$1.467 per millicurie applicable only to millicuries with greater than 5-year half-life. Such election must be provided in writing to the disposal site operator prior to July 1, 2022.

MAXIMUM MILLICURIE CHARGE IS \$293,600, PER SHIPMENT (400,000 MCI).

B. Irradiated Hardware Charges (See Note B under Miscellaneous) \$111,394 per shipment

C. Special Nuclear Material Surcharge

\$22.273 per gram

D. Atlantic Compact Commission administrative surcharge

\$6.00 per cubic foot (Subject to change during year)

#### **NOTES**

- A. Surcharges for the Barnwell Extended Care Fund and the Decommissioning Trust Fund are included in the rates.
- B. Irradiated hardware: As a general rule, billing as irradiated hardware pertains to shipments of exceptionally high activity that require clearing of the site and special off-loading into a slit trench. These generally include TN-RAM and other horizontally offloaded cask shipments. In addition to items of irradiated hardware, shipments considered irradiated hardware, for purposes of disposal, have included certain sealed sources and materials with exceptionally high levels of radioactivity.
- C. Large components (e.g., steam generators, reactor pressure vessels, coolant pumps)

Disposal fees for large components (e.g., steam generators, reactor pressure vessels, reactor coolant pumps, or items that will not fit into standard sized disposal vaults) are based on the generally applicable rates, in their entirety, except that the weight and volume used to determine density and weight related charges is calculated as follows:

- 1. For packages where the large component shell qualifies as the disposal vault per DHEC regulations, weight and volume calculations are based on all sub-components and material contained within the inside surface of the large component shell, including all internals and any stabilization media injected by the shipper, but excluding the shell itself and all incidental external attachments required for shipping and handling; and
- 2. For packages with a separate shipping container that qualifies as the disposal vault per DHEC regulations, weight and volume calculations are based on the large component, all sub-components and material contained within the inside surface of the shipping container, including any stabilization media injected by the shipper (including that between the large component and the shipping



#### Pursuant to 48-46-40(A)(2), S.C.C.

container), but excluding the shipping container itself and all incidental external attachments required for shipping and handling.

- D. Co-mingled shipments from brokers and processors: For containers that include waste from different generators (DHEC permittees), the weight and density of the waste from each generator will be assessed separately for purposes of the weight charge in I.A. The dose of the container as a whole will be used to assess the dose multiplier in I.B. The millicurie charge 2.A. above, applies individually to each portion of waste in the shipment from each generator. The disposal site operator will provide guidelines for application of this method.
- E. Transport vehicles with additional shielding features may be subject to an additional handling fee which will be provided upon request.
- F. In certain circumstances, the disposal site operator may assess additional charges for necessary services that are not part of and are additional to disposal rates established by the State of South Carolina. These include decontamination services and special services as described in the Barnwell Site Disposal Criteria.
- G. The disposal site operator has established the following policies and procedures which are provided herein for informational purposes:
  - i. Terms of payment are net 30 days upon presentation of invoices. A per-month service charge of one and one-half percent  $(1\frac{1}{2}\%)$  shall be levied on accounts not paid within thirty (30) days.
  - ii. Company purchase orders or a written letter of authorization and substance acceptable to CNS shall be received before receipt of radioactive waste material at the Barnwell Site and shall refer to CNS Radioactive Material License, the Barnwell Site Disposal Criteria and subsequent changes thereto.
  - iii. All shipments shall receive a CNS shipment identification number and conform to the Prior Notification Plan.



## Atlantic Compact Regional Waste Alternative Rate Schedule

Effective July 1, 2022

## Option A Pricing (applicable to Generators who do not elect Option B Access Fee Pricing)

**Use Maximum Uniform Rate Schedule** 

## Option B Access Fee (at Generator's election)

An individual nuclear power reactor, or any non-reactor waste generator with a South Carolina permit to ship waste to the Barnwell site is eligible to be an Option B Participant.

Option B Participants may elect Option B Access Fee pricing by committing to an annual access fee to be paid in quarterly installments. The first quarter's access fee will be assessed on July 15, 2022. All Option B participants will provide the disposal site operator a volume projection and shipping schedule for Fiscal Year ("FY") 2023 and update the projection and shipping schedule throughout the year, as necessary.

#### **QUARTERLY ACCESS FEE**

Option B Participants shall pay a quarterly access fee and an annual true-up payment, if required, in lieu of disposal charges for individual shipments.

The access fee for all four quarters must be paid, even if the Option B Participant does not plan to ship waste during any specific quarter. Quarterly access fee payments are due <u>not later than</u>:

- July 15, 2022
- October 1, 2022
- January 1, 2023
- April 1, 2023

An <u>interim revenue requirement</u> shall be used as the basis for determining an annual access fee for each Option B Participant. The annual access fee may be determined by dividing the interim revenue requirement for operating costs (less the amount of payments projected to be received from Option A disposal rate customers), evenly among all Option B Participants or an additional allocation method agreed upon between Energy Solutions/Chem-Nuclear and each Option B Participant.

The annual access fees for each Option B Participant shall be split into quarterly payments. In recognition of the request by Option B Participants for billing to reflect a calendar year budgeting cycle, the quarterly access fee payments shall be calculated using the interim revenue requirement for both the current fiscal year and the prior fiscal year as follows:

The interim revenue requirement for the current fiscal year, FY 2023, is \$6,000,000. The interim revenue requirement for the prior fiscal year, FY 2022, was \$6,000,000.

<sup>&</sup>lt;sup>1</sup> In general these numbers may vary. In years where the interim revenue requirement for the current fiscal year differs from the interim revenue requirement for the prior fiscal year, a final annual true-up payment may be billed as modified by any amounts payable to the Option B Participants as outlined in the Rate Reconciliation section.

The quarterly access fee for payments due July 15, 2022 and October 1, 2022 shall be calculated based on the interim revenue requirement for the current fiscal year, FY 2023 The interim revenue requirement for FY 2023 (less the amount of payments projected to be received from Option A disposal rate customers), shall be divided in half, and that amount shall be divided into two quarterly payments and shall be divided evenly among all Option B Participants.

The quarterly access fee for payments due January 1, 2023 and April 1, 2023 shall be based on the interim revenue requirement for the current fiscal year, FY 2023. The interim revenue requirement for FY 2023 (less the amount of payments projected to be received from Option A disposal rate customers) shall be divided in half, and that amount shall be divided into two quarterly payments and shall be divided evenly among all Option B Participants.

Chem-Nuclear shall monitor costs and cash receipts from July 2022 through February 2023 and, if a significant over collection is anticipated, may reduce a future access fee payment to reduce the anticipated over collection.

#### **VOLUME ALLOCATIONS**

Volume Allocations. Each Option B Participant shall be allocated an equal share of up to 7,000 cubic feet of disposal capacity (volume allocation), which may be disposed at no further charge. Volume allocations for Option B Participants may be pooled within a company upon written notification to Chem-Nuclear from the applicable Participants prior to August 1, 2022. An Option B Participant may transfer unused allocation to another Option B Participant by providing Chem-Nuclear a signed statement executing the transfer.

#### VARIABLE COST SURCHARGE

For each cubic foot of waste received that is in excess of an Option B Participant's volume allocation (or pooled allocation), the Participant shall be assessed an additional \$110 per cubic foot to cover variable costs and margin related to acceptance of the waste. (The variable cost surcharge does not apply to any waste volume resulting from the transfer of excess volume allocation from one Option B Participant to another.)

#### RATE RECONCILIATION

Final approval by the PSC of allowable operating costs for FY 2022 is expected no later than June 30, 2023. In the event that the total of operating costs approved by the PSC, plus margin, for FY 2022 is less than the amounts paid through Option B fees and variable cost surcharges, plus payments received for Any Option A disposal charges, Irradiated Hardware, Steam Generators or other Large Components, each Option B Participant will be due an equal share of the over-payment. The over-payment will be processed by the method agreed upon by the Option B Participants. If an Option B Participant from FY 21/22 is no longer a participant, that participant's over-payment will be refunded no later than June 30, 2023.

If the total of operating costs approved by the PSC, plus margin, for FY 2022 exceeds the amounts paid through Option B fees and variable cost surcharges, plus payments received for any Option A disposal charges, Irradiated Hardware, Steam Generators, or other Large Components, each Option B Participant will be invoiced no later than June 30, 2023 on a proportionate per reactor basis share of the difference, unless EnergySolutions/Chem-Nuclear voluntarily waives it rights under South Carolina law to seek or accept such revenues.

#### **VOLUME PROJECTIONS**

Each Option B Participant shall provide the disposal site operator a projection of its expected waste volumes for the fiscal year not later than July 1, 2022, and will update the projection on a quarterly basis, or as conditions warrant. Option B Participants recognize that shipment of waste to the disposal site at a relatively even pace throughout the fiscal year helps minimize operating costs.

#### IRRADIATED HARDWARE (See Note D)

Irradiated Hardware is not included in Volume Allocations and is not considered as waste in excess of volume allocations. Pricing will be calculated on a case-by-case basis in an amount sufficient to cover all allowable operating costs incurred by the site operator to dispose of the waste.

#### STEAM GENERATORS AND OTHER LARGE COMPONENTS (See Note E)

Large Components are not included in Volume Allocations and are not considered as waste in excess of volume allocations. Pricing will be calculated on a case-by-case basis in an amount sufficient to cover all allowable operating costs incurred by the site operator to dispose of the waste.

#### NOTES:

- A. Due to staffing limitations, Chem-Nuclear is authorized to limit total waste volumes received during the fiscal year to 12,433 cubic feet (excluding large components and irradiated hardware).
- B. Surcharges for the extended care fund and decommissioning trust fund are included in the disposal rates.
- C. Sealed sources: Requests for disposal are reviewed by South Carolina Department of Health and Environmental Control to ensure that the waste was generated within the Atlantic Compact region.
- D. Irradiated hardware and high dose shipments: As a general rule, case-by-case billing as irradiated hardware pertains to shipments of exceptionally high activity that require clearing of the site and special off-loading into a slit trench. These generally include TN-RAM and other horizontally offloaded cask shipments. In addition to items of irradiated hardware, if a shipment requires substantial special handling, due to exceptionally high package surface doses, additional surcharges may be authorized by Board staff in an amount that will reimburse the site operator for costs that have not been budgeted.
- E. Large components: Pricing will be calculated on a case-by-case basis in an amount sufficient to cover all allowable operating costs incurred by the site operator, and associated margin, as a result of the request for disposal and disposal of the waste. Large components include steam generators, reactor pressure vessels, reactor coolant pumps, or items that require construction of special-sized disposal vaults. Large components also include items that may fit into the standard sized vault but fit so inefficiently due to their shape and geometry that it is less costly to build a specially sized vault.
- F. Because the disposal of large components is rare and is not considered as a factor in planning and budgeting for site operations, a supplemental service fee sufficient to cover all additional costs and margin may be authorized by Board staff to cover the disposal site operator's costs for planning, consultation, feasibility studies, cost estimating, regulatory consultation, and other necessary costs that have not been budgeted and accounted for as operating costs for the fiscal year. This supplemental service fee is applicable whether or not the generator ultimately commits to disposal of the large component(s), and whether or not the waste is eventually disposed at the Barnwell site.
- G. Because the operating costs for disposal of large components may be significantly affected by the number of such components and the schedule for delivery, generators are strongly encouraged to coordinate their plans for shipment of large components to Barnwell in order to reduce unit costs through better economies of scale. Early in project planning, shippers are encouraged to consult with the disposal site operator on designs and configurations that may reduce handling and offloading costs at the disposal site.
- H. Transport vehicles with additional shielding features may be subject to an additional handling fee which will be provided upon request.
- In certain circumstances, the disposal site operator may assess additional charges for necessary services that are not part of and are additional to disposal rates established by the State of South Carolina. These include decontamination services and special services as described in the Barnwell Site Disposal Criteria.
- J. The disposal site operator has established the following policies and procedures which are provided herein for informational purposes:
  - i. Terms of payment are net 30 days upon presentation of invoices. A per-month service charge of one and one-half percent (1½%) shall be levied on accounts not paid within thirty (30) days.

- ii. Company purchase orders or a written letter of authorization and substance acceptable to CNS shall be received before receipt of radioactive waste material at the Barnwell Site and shall refer to CNS Radioactive Material License, the Barnwell Site Disposal Criteria and subsequent changes thereto.
- iii. All shipments shall receive a CNS shipment identification number and conform to the Prior Notification Plan.

### PPI Tables 10 11 12 (other selected services and chemical mfg) marked

Table 10. Producer price indexes and percentage changes for net output of selected industries and industry groups, not seasonally adjusted — Continued

[February 2022]

Title <sup>1</sup>		Industry code	Unadjusted index <sup>2</sup>					Unadjusted 1-month percent change <sup>2</sup>	Unadjusted 12-month percent change <sup>2</sup>
			Oct. 2021	Nov. 2021 <sup>p</sup>	Dec. 2021 <sup>p</sup>	Jan. 2022 <sup>p</sup>	Feb. 2022 <sup>p</sup>	Jan. to Feb. <sup>p</sup>	Feb. 2021 to Feb. 2022 <sup>p</sup>
Information - Continued				•		•			
Publishing industries, except Internet	12/03	511	119.476	119.537	118.862	120.583	118.976	-1.3	1.7
Broadcasting, except Internet	12/03	515	128.750	132.856	133.689	132.449	131.986	-0.3	-1.6
Telecommunications	12/03	517	102.535	102.138	102.367	102.749	102.957	0.2	1.5
Data processing and related services	12/03	5182	111.779	111.773	111.745	110.736	111.231	0.4	-0.1
Internet publishing and web search portals	12/09	519130	90.264	90.551	90.865	90.523	90.020	-0.6	5.2
Selected health care industries	12/06	ASHC	134.148	134.305	134.457	135.631	135.804	0.1	2.0
Offices of physicians.	12/96	6211	142.945	143.312	143.497	143.127	143.372	0.2	1.0
Offices of dentists.	06/10	6212	123.275	123.275	123.275	125.864	126.969	0.9	3.9
Medical and diagnostic laboratories	12/03	6215	103.817	103.785	103.759	103.761	103.733	0.0	-0.2
Home health care services	12/96	6216	152.128	152,253	152.253	154.101	154.144	0.0	2.6
Blood and organ banks	06/06	621991	121.914	122.160	122.409	122.651	123.095	0.4	1.8
Hospitals	12/92	622	217.618	217.752	218.083	220.890	220.999	0.0	2.1
Nursing care facilities	12/03	6231	163.172	163.640	163.618	164.112	164.106	0.0	1.2
Residential developmental disability homes	12/03	62321-	199.297	199.202	199.251	200.697	200.699	0.0	5.0
Other selected services less trade, transportation, and warehousing									
industries	12/06	ASTDSV	133.635	134.815	134.938	136.396	136.022	-0.3	4.0
Depository credit intermediation	12/03	5221	100.597	102.451	100.944	102.948	100.943	-1.9	1.5
Security, commodity contracts and like activity	12/03	523	225.933	234.236	233.580	235.450	230.789	-2.0	5.0
Insurance carriers and related activities	12/03	524	143.612	143.612	143.733	144.461	144.668	0.1	1.0
Lessors of nonres bldg (exc miniwarehouse)	12/03	53112-	132.399	132.923	133.865	135.715	131.601	-3.0	2.0
Lessors of miniwarehouse and self storage units	12/03	53113-	167.159	167.700	169.701	170.079	171.961	1.1	14.4
Offices of real estate agents and brokers	12/03	5312	172.635	173.093	173.544	175.110	176.433	0.8	10.7
Real estate property managers	12/03	53131-	122.183	122.446	123.162	123.627	125.389	1.4	6.1
Offices of real estate appraisers	12/03	531320	108.102	109.100	110.665	113.385	115.534	1.9	10.9
Automotive equipment rental and leasing	06/01	5321	156.753	154.496	152.038	145.284	146.884	1.1	16.3
Other heavy machinery rental and leasing	12/03	532412	122.168	122.623	122.990	123.447	124.058	0.5	4.4
Legal services	12/96	5411	245.326	245.074	245.279	251.214	254.066	1.1	5.8
Offices of certified public accountants	12/03	541211	125.946	126.166	126.686	127.439	128.106	0.5	-0.4
Other accounting services.	12/03	541219	147.227	148.224	149.676	149.676	150.376	0.5	7.8
Architectural, engineering and related services	12/96	5413	175.733	175.867	175.848	180.822	181.012	0.1	4.0
Management and technical consulting services	06/06	5416	127.330	126.850	127.111	130.200	129.929	-0.2	3.3
Advertising agencies.	12/03	54181-	111.332	116.324	118.400	120.435	120.631	0.2	5.7
Employment services.	12/96	5613	151.774	153.107	154.534	155.759	155.631	-0.1	4.5
Travel agencies.	12/03	56151-	98.422	98.018	97.211	97.977	97.960	0.0	1.6
Security guards and patrol services	12/04	561612	139.895	139.851	140.505	142.086	142.237	0.1	6.1
Janitorial services	12/03 12/03	56172- 5621	126.078	126.381	129.468	131.547	133.309 159.505	1.3 1.5	8.0 4.0
Waste collection.	1	l .	156.163	156.273	156.432	157.196		_	1
Amusement and theme parks	06/06 12/05	71311- 71391-	191.588 134.828	197.174 139.083	199.985 141.294	197.103 146.099	198.601 146.201	0.8 0.1	5.8 6.6
•	12/05	71391-	110.671	110.671	141.294	109.190	109.726	0.1	3.3
Fitness and recreational sports centers	12/04	71394-	171.550	172.589	175.007	177.442	179.726	1.0	14.9
Commercial machinery repair and maintenance.	06/06	8113	152.729	152.992	152.992	156.546	160.028	2.2	10.7
Commorate machinery repair and maintenance	30,00		152.723	102.002	102.002	100.040	100.020		10.7

<sup>&</sup>lt;sup>1</sup> Indexes in this table are derived from the net-output-weighted industry price indexes. Because of differences in coverage and aggregation methodology, they will generally not match the movements of similarly titled indexes which are derived from traditional commodity groupings.

<sup>&</sup>lt;sup>2</sup> All indexes are subject to revision for 4 months after their originally scheduled publication to incorporate late reports and corrections by survey respondents.

<sup>&</sup>lt;sup>3</sup> Formerly titled "Total traditional service industries."

p Preliminary
"-" Data not available.

## PPI Tables 10\_11\_12 (other selected services and chemical mfg) marked

Table 11. Producer price indexes for net output of selected industries and their products, not seasonally adjusted — Continued

[February 2022]

	Industry	<b>.</b>	Index		Unadjusted index <sup>2</sup>				
Title <sup>1</sup>		Product code	base	Oct. 2021	Nov. 2021 <sup>p</sup>	Dec. 2021 <sup>p</sup>	Jan. 2022 <sup>p</sup>	Feb. 2022 <sup>p</sup>	
Asphalt shingle and coating materials manufacturing - Continued									
Roofing asphalts and pitches, coatings, and cements		324122-1	06/84	270.111	269.885	270.018	278.276	279.587	
nonbuilding use.  Asphalt smooth-surfaced roll roofing and cap sheets, organic and fiberglass base.		324122-2 324122-21	12/12	295.817 118.362	305.371 113.898	309.428 115.329	311.768 116.723	318.907 118.049	
Asphalt mineral-surfaced roll roofing and cap sheets, organic and fiberglass base.		324122-22	06/06	227.054	230.874	231.625	235.364	235.417	
Other prepared asphalt and tar products for roofing and siding		324122-27 324122-SM	06/06	152.024	152.573	155.837	161.218	164.146	
Other petroleum and coal products mfg	32419		12/84	460.643	460.689	464.175	469.710	476.214	
Petroleum lubricating oil and grease mfg  Primary products	1	324191-P	12/80 12/80	527.871 555.524	527.774 555.413	528.583 556.332	532.919 561.114	535.036 563.527	
Petroleum lubricating oils and greases, refined petroleum.  Lubricating oils (incl. hydraulic fluids, etc.), refined petroleum.  Secondary products and miscellaneous receipts.		324191-0 324191-011 324191-SM	12/80 12/80	555.524 573.693	555.413 573.564	556.332 574.625	561.114 579.318	563.527 582.101	
All other petroleum and coal products mfg	324199		12/03	281.833	282.206	291.622	299.605	315.801	
Primary products  Coke oven and blast furnace products, made in coke oven establishments		324199-P 324199-3	12/03 12/09	290.626 144.873	291.028 142.346	301.312 144.957	309.392 152.375	325.739 166.843	
All other petroleum and coal products (excl. coke oven products), made in coke oven estab		324199-9 324199-SM	12/02	319.518	325.518	341.950	343.925	349.021	
Secondary products	1	324199-S	12/09	156.340	156.210	149.735	_	_	
Chemical mfg	325		12/84	335.868	338.607	339.665	342.692	345.267	
Basic chemical mfg	3251		12/84	409.936	421.631	421.737	420.865	425.970	
Petrochemical mfg	32511		12/03	206.455	199.680	185.209	186.887	196.553	
Petrochemical manufacturing.  Primary products.  Secondary products and miscellaneous receipts.		325110-P 325110-SM	12/03 12/03	208.163 228.813	201.569 223.747	187.105 209.010	187.956 202.225	197.429 210.130	
Industrial gas mfg.		323110-3W	12/03	190.860	211.277	219.571	219.587	224.574	
Industrial gas manufacturing.	325120		12/03	191.382	211.896	220.228	220.243	225.251	
Primary products	1	325120-P	06/81	317.100	352.030	366.219	366.227	374.709	
Oxygen.		325120-A	06/81	387.726	387.726	387.824	390.075	392.846	
Argon and hydrogen.  Other industrial gases (including fluorocarbon and acetylene).  Carbon dioxide.		325120-C 325120-T 325120-4	06/09 06/09 06/81	86.194 215.523 512.642	86.128 251.825 512.264	86.094 266.640 511.515	86.540 266.369 512.218	87.242 274.564 513.035	
Nitrogen	1	325120-7	06/81	246.682	247.956	248.180	247.932	249.141	
Secondary products and miscellaneous receipts		325120-SM							
Synthetic dye and pigment mfg	32513		12/03	151.769	157.765	156.252	160.220	165.550	
Synthetic dye and pigment manufacturing	325130	325130-P	12/11 12/11	100.278 98.357	104.238 102.475	103.238 101.408	105.860 104.138	109.380 107.782	
All other inorganic pigments, including TiO2, chrome colors, and other white opaque pigments.		325130-N	09/21	101.126	106.750	105.385	106.739	111.751	
Synthetic organic dyes, pigments, lakes, and toners	1	325130-R 325130-R8	09/21 12/82	101.752 115.058	102.578 115.719	102.138 118.851	108.551 136.889	109.194 139.204	
Synthetic organic pigments, lakes, and toners.  Secondary products and miscellaneous receipts.		325130-R9 325130-SM	12/82	185.523	187.215	183.946	188.312	188.406	
Secondary products.	1	325130-S	12/11	-	123.540	123.710	124.628	126.437	
Other basic inorganic chemical manufacturing			12/03	320.663	324.908	335.547	342.291	351.349	
Other basic inorganic chemical manufacturing		325180-P	12/10 12/10	139.664 113.739	141.518 115.510	146.151 119.236	149.115 122.938	153.080 127.163	
Potassium and sodium compounds, excluding bleaches, alkalies, and alum	1	325180-A	12/82	457.029	468.670	477.729	490.526	514.413	
All other inorganic chemicals	1	325180-H	12/03	333.429	341.010	344.889	348.746	354.454	
Inorganic acids, excluding nitric, sulfuric and phosphoric	1	325180-3 325180-4	12/82 12/80	125.949 469.401	129.747 475.981	129.739 502.066	134.198 575.880	145.759 585.123	
Carbon black, all processes.		325180-4	12/83	476.385	493.991	554.383	545.341	619.201	
Other alkalies.		325180-7	12/11	114.883	116.947	116.304	127.078	135.041	
Sulfuric acid	1	325180-9 325180-SM	12/82	164.917	163.839	190.547	190.639	190.596	
Secondary products and miscellaneous receipts	1	325180-SM	12/10	273.566	273.566	284.633	284.832	_	
Secondary products.	1	325180-S	12/10	181.729	187.235	190.280	187.024	192.942	
Other basic organic chemical mfg.	32519		12/03	209.001	219.318	221.910	217.851	216.219	
Ethyl alcohol manufacturing.		005400 5	12/03	229.684	261.978	273.764	239.785	228.249	
Primary products		325193-P 325193-0	12/82 12/82	266.588 266.588	317.746 317.746	334.121 334.121	275.735 275.735	248.562 248.562	
<u> </u>		3201000	12/02	200.000	517.740	001.121	2.0.700	210.002	

See footnotes at end of table.

## PPI Tables 10\_11\_12 (other selected services and chemical mfg) marked

Table 12. Producer price index percentage changes for the net output of selected industries and their products, not seasonally adjusted — Continued

[February 2022]

Title <sup>1</sup>	Industry code	Product code	Unadjusted 12-month percent change <sup>2</sup>	Unadjusted 1-month percent			rcent chanç	nt change <sup>2</sup>	
····			Feb. 2021 to Feb. 2022 <sup>p</sup>	Sept. to Oct.	Oct. to Nov. <sup>p</sup>	Nov. to Dec. <sup>p</sup>	Dec. to Jan. <sup>p</sup>	Jan. to Feb. <sup>p</sup>	
Asphalt shingle and coating materials manufacturing - Continued								•	
Roofing asphalts and pitches, coatings, and cements		324122-1	10.5	-0.1	-0.1	0.0	3.1	0.5	
Prepared asphalt and tar roofing and siding products, incl. saturated felts for nonbuilding use.		324122-2	22.5	-0.1	3.2	1.3	0.8	2.3	
Asphalt smooth-surfaced roll roofing and cap sheets, organic and fiberglass		324122-2	22.5	-0.1	0.2	1.5	0.0	2.0	
base		324122-21	18.9	0.1	-3.8	1.3	1.2	1.1	
Asphalt mineral-surfaced roll roofing and cap sheets, organic and fiberglass base		324122-22	13.8	1.9	1.7	0.3	1.6	0.0	
Other prepared asphalt and tar products for roofing and siding		324122-27	22.0	2.4	0.4	2.1	3.5	1.8	
Secondary products and miscellaneous receipts		324122-SM							
Other petroleum and coal products mfg	32419		16.3	3.0	0.0	8.0	1.2	1.4	
Petroleum lubricating oil and grease mfg	324191		14.1	3.6	0.0	0.2	0.8	0.4	
Primary products		324191-P	14.7	3.6	0.0	0.2	0.9	0.4	
Petroleum lubricating oils and greases, refined petroleum		324191-0 324191-011	14.7 15.5	3.6 3.9	0.0 0.0	0.2 0.2	0.9 0.8	0.4 0.5	
Secondary products and miscellaneous receipts		324191-SM	15.5	0.9	0.0	0.2	0.0	0.5	
All other petroleum and coal products mfg	324199		25.4	0.4	0.1	3.3	2.7	5.4	
Primary products	327133	324199-P	24.9	0.4	0.1	3.5	2.7	5.4	
Coke oven and blast furnace products, made in coke oven establishments		324199-3	13.8	-2.4	-1.7	1.8	5.1	9.5	
All other petroleum and coal products (excl. coke oven products), made in coke oven estab		324199-9	37.8	2.8	1.9	5.0	0.6	1.5	
Secondary products and miscellaneous receipts.		324199-SM	07.0	2.0	1.0	5.0	0.0	1.5	
Secondary products		324199-S	-	8.2	-0.1	-4.1	-	-	
Chemical mfg	325		13.9	1.4	0.8	0.3	0.9	0.8	
Basic chemical mfg	3251		24.2	2.1	2.9	0.0	-0.2	1.2	
Petrochemical mfg.	32511		30.4	2.1	-3.3	-7.2	0.9	5.2	
Petrochemical manufacturing	325110		28.9	1.7	-3.2	-7.2	0.5	5.0	
Primary products	020110	325110-P	16.9	-1.6	-2.2	-6.6	-3.2	3.9	
Secondary products and miscellaneous receipts		325110-SM							
Industrial gas mfg	32512		20.5	-2.6	10.7	3.9	0.0	2.3	
Industrial gas manufacturing	325120		20.6	-2.6	10.7	3.9	0.0	2.3	
Primary products		325120-P	21.1	-2.7	11.0	4.0	0.0	2.3	
Oxygen.		325120-A	3.8	-0.1	0.0	0.0	0.6	0.7	
Argon and hydrogen  Other industrial gases (including fluorocarbon and acetylene)		325120-C 325120-T	-2.1 32.9	-1.0 -3.7	-0.1 16.8	0.0 5.9	0.5 -0.1	0.8 3.1	
Carbon dioxide.		325120-1	1.0	-2.3	-0.1	-0.1	0.1	0.2	
Nitrogen		325120-7	0.2	0.2	0.5	0.1	-0.1	0.5	
Secondary products and miscellaneous receipts.		325120-SM							
Synthetic dye and pigment mfg	32513		18.7	1.3	4.0	-1.0	2.5	3.3	
Synthetic dye and pigment manufacturing	325130		18.6	1.3	3.9	-1.0	2.5	3.3	
Primary products		325130-P	19.4	1.3	4.2	-1.0	2.7	3.5	
All other inorganic pigments, including TiO2, chrome colors, and other white opaque pigments		325130-N	_	1.1	5.6	-1.3	1.3	4.7	
Synthetic organic dyes, pigments, lakes, and toners		325130-R	_	1.8	0.8	-0.4	6.3	0.6	
Synthetic organic dyes		325130-R8	45.3	4.9	0.6	2.7	15.2	1.7	
Synthetic organic pigments, lakes, and toners		325130-R9	15.9	0.5	0.9	-1.7	2.4	0.0	
Secondary products and miscellaneous receipts.		325130-SM 325130-S	_	_	_	0.1	0.7	1.5	
Secondary products	00540	323130-3							
Other basic inorganic chemical manufacturing.			28.9	6.2	1.3	3.3	2.0	2.6	
Other basic inorganic chemical manufacturing.	325180	325180-P	28.9 24.7	6.1 0.5	1.3 1.6	3.3 3.2	2.0 3.1	2.7 3.4	
Primary products		325180-P 325180-A	24.7	0.5 1.2	1.6 2.5	3.2 1.9	3.1 2.7	3.4 4.9	
All other inorganic chemicals		325180-H	13.6	0.0	2.3	1.1	1.1	1.6	
Inorganic acids, excluding nitric, sulfuric and phosphoric		325180-3	32.6	3.9	3.0	0.0	3.4	8.6	
Sodium hydroxide (caustic soda)		325180-4	57.5	6.4	1.4	5.5	14.7	1.6	
Carbon black, all processes.  Other alkalies.		325180-6 325180-7	63.0 30.6	2.0 0.2	3.7 1.8	12.2 -0.5	-1.6 9.3	13.5 6.3	
Outor analico		325180-7	59.9	0.2	-0.7	16.3	0.0	0.0	
Sulfuric acid	I	325180-SM		3.0	J.,	. 3.0	3.0	3.0	
Sulfuric acid		323 100-3W							
Secondary products and miscellaneous receipts		325180-M	_	32.1	0.0	4.0	0.1	_	
Secondary products and miscellaneous receipts.	32519		25.2 20.5	32.1 -1.1 0.9	0.0 3.0 4.9	4.0 1.6 1.2	0.1 -1.7 -1.8	- 3.2 -0.7	

See footnotes at end of table.